

WE CLAIM:

1. A method for providing persistency fault tolerant data stored in a database on a device in a networked environment for an external application, the device having an active processor system and a standby processor system, the method
5 comprising the following steps:

providing an identical standby copy of an active database located on the active processor system, on the standby processor system;

monitoring the active processor for a failure;

- assuming control by the standby processor system assumes control when
10 the failure is detected;

wherein switching from the active database to the standby database is transparent to the external application.

2. The method as recited in claim 1 further comprising the step of keeping a
15 compressed backup copy of the database with signature on the active processor system and on the standby processor system.

3. The method as recited in claim 2 further comprising the step of recovering data from the compressed backup copy when a failure event occurs.

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4. The method as recited in claim 2 further comprising the step of recovering data from the compressed backup copy when a corruption event occurs.

5. The method as recited in claim 1 further comprising the step of defining
5 the database using a predetermined format.

6. The method as recited in claim 5 further comprising the step of generating structure and metadata corresponding to the database using the definition in the predetermined format.

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7. The method as recited in claim 1 further comprising the step of accessing the active database through an application program interface.

8. The method as recited in claim 5 wherein the predetermined format is
15 Structure of Management Information version 2 (SMIv2) format.

9. A system for providing persistency fault tolerant data stored in a database on a device in a networked environment for an external application, the device having an active processor system and a standby processor system, the method
20 comprising the following steps:

standby means for providing an identical standby copy of an active database located on the active processor system, on the standby processor system;

monitor means for monitoring the active processor for a failure;

control means for assuming control by the standby processor system

5 assumes control when the failure is detected;

wherein switching from the active database to the standby database is transparent to an external application.

10. The system as recited in claim 9 further comprising backup means for
10 keeping a compressed backup copy of the database with signature on the active processor system and on the standby processor system.

11. The system as recited in claim 10 further means for recovering data from the compressed backup copy when a failure event occurs.

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12. The system as recited in claim 10 further means for recovering data from the compressed backup copy when a corruption event occurs.

13. The system as recited in claim 9 further means for defining the database
20 using a predetermined format.

14. The system as recited in claim 13 further comprising means for generating structure and metadata corresponding to the database using the definition in the predetermined format.

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15. The system as recited in claim 9 further comprising means for accessing the active database through an application program interface.

16. The system as recited in claim 13 wherein the predetermined format is

10 Structure of Management Information version 2 (SMIv2) format.